REMARKS

In the instant application, claims 1-5 are currently pending. Reconsideration of the instant application is respectfully requested in view of the foregoing amendments and following remarks.

Claim Objections:

Claim 1 is objected to because it ends with a comma instead of a period. This typographical error has been amended. Claim 5 is objected to under 37 CFR 1.75(c) as being in improper form. Claim 5 is hereby amended to remove the multiple dependency. As such, in view of the amendments, the objections have now been rendered moot. Withdrawal of the objections is respectfully requested.

Rejections under 35 U.S.C. § 112:

Claims 3-5 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3-5 have been amended to correct the dependency and claim 3 has been amended to delete the term "either." The instant claim amendments are believed to address the rejections under 35 U.S.C. § 112. Accordingly, with withdrawal of these rejections is respectfully requested.

Rejections under 35 U.S.C. § 102:

Claims 1-5 are rejected under 35 USC 102(e) as being anticipated by Ong et al (U.S. 7,381,781) (hereinafter "Ong"). The process of claim 1 has been amended to feature a metathesis reaction and a hydrogenation reaction occurring simultaneously. Support for this amendment can be found, for example, on page 4, lines 18-19. Ong discloses a process for the production of hydrogenated nitrile rubber polymers by subjecting the substrate to a metathesis reaction followed, optionally, by a hydrogenated reaction. *See Ong, Abstract and column 3, lines 25-27.* The reaction disclosed in Ong is essentially a two-step process. In contrast, instant claim 1 has been amended to feature the metathesis and hydrogenation reactions occurring

simultaneously. The Office opines that the examples of Ong indicate that the metathesis catalyst may not be removed after metathesis and, therefore, would exist in the presence of the hydrogenation reaction. Specifically, the Office points to the last paragraph of the examples in Ong as support that the metathesis catalyst could be used as a hydrogenation catalyst. However, there is no disclosure in Ong of the metathesis and hydrogenation reactions occurring simultaneously as featured in amended claim 1. First, the metathesis reaction in Ong is accomplished without the presence of hydrogen. As shown in the reaction parameters of the examples in Ong, the reaction takes place under nitrogen blanket. *See column 10, lines 15-16.* Instant claim 1 provides the reaction take place in the presence of hydrogen. Further, the last paragraph after the examples in Ong states that the Ruthenium metathesis catalyst could be used to hydrogenate the polymer, however, Ong adds that the metathesis catalyst would have to be first treated with hydrogen to convert the catalyst such that it can act as a hydrogenation catalyst. *See Ong, column 10, lines 42-47.* This would require an additional step, in Ong, of converting the catalyst prior to performing the hydrogenation reaction. Thus, the hydrogenation reaction occurs as a separate step in Ong and does not occur simultaneously with the metathesis reaction, as featured in instant claim 1. As such, Ong does not teach the features of instant claim 1 to anticipate claim 1. Withdrawal of the rejection is respectfully requested.

Claims 1-5 are rejected under 35 USC 102(e) as being anticipated by Guerin et al (U. S. 2004/0132906) (hereinafter "Guerin"). Guerin discloses adhesive polymer composites including at least one nitrile rubber polymer and a process for preparing optionally hydrogenated HBR. Guerin discloses two steps in preparing the hydrogenated HBR, first metathesis followed by hydrogenation. In contrast, instant claim 1, as amended, metathesis and hydrogenation are carried out simultaneously. The Office states that in the examples of Guerin there is no indication that the metathesis catalyst was removed and would exist in the presence of the hydrogenation reaction. The Office points to the last paragraph of the example as support for Guerin's assertion that the metathesis catalyst could be used as the hydrogenation catalyst. Applicants respectfully disagree. Example 1 of Guerin discloses that metathesis was carried out in the presence of ethylene under a pressure of 500psi. *See Guerin*

paragraph [0014]. In contrast, present claim 1 features a metathesis reaction and hydrogenation reaction being carried out in the presence of hydrogen. Further, even though the hydrogenation step in Guerin was carried out in the same reactor as the metathesis and in the presence of the same catalyst, the cement was degassed 3 times with hydrogen. *See Guerin, paragraph [0016]*. As such, Guerin discloses two steps, a metathesis step followed by a degassing step, rather than a simultaneous metathesis and hydrogenation reaction as featured in instant claim 1. Moreover, although Guerin states that the Ruthenium metathesis catalyst could be used to hydrogenate the polymer, there is no disclosure that such could be accomplished simultaneously with the hydrogenation reaction. As such, Guerin does not anticipate instant claim 1. Withdrawal of the rejection is respectfully requested.

Claims 2-5 all either directly or indirectly depend from claim 1 and are patentable over the cited references for at least the same reasons as set forth with regard to claim 1. Withdrawal of the rejection of these claims is respectfully requested.

Double Patenting Rejection:

Claims 1-5 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 7,381,781, optionally in view of U.S. 2004/0132906. As shown above, the instant claims are not anticipated by either Ong or Guerin. Furthermore, the instant claims are not obvious in view of either Ong or Guerin. Neither Ong nor Guerin disclose a process for the preparation of hydrogenated nitrile rubber where a metathesis and hydrogenation reaction occur simultaneously. Even though both references disclose that the metathesis catalyst can be present during the hydrogenation part of the reaction, both require additional steps in order to utilized the catalyst. Moreover, both employ different gasses in the metathesis step of the reaction (Ong uses nitrogen and Guerin uses ethylene). However, the preparation of instant claims is done in the presence of hydrogen and the metathesis reaction and hydrogenation reaction occur simultaneously. There is nothing disclosed in the references that would lead one skilled in the art to manipulate the initial gas or perform the metathesis reaction and hydrogenation reaction simultaneously. Therefore, the instant claims are not obvious in

view of either Ong or Guerin. In view of the foregoing, it is respectfully requested that the double patenting rejection be withdrawn.

In view of the foregoing, Applicants believe that claims 1-5 are now in condition for allowance.

Should the Examiner have any questions or comments, or need any additional information from Applicant's attorney, the Examiner is invited to contact the undersigned at their convenience.

The USPTO is hereby authorized to charge any fees, including any fees for an extension of time or those under 37 C.F.R. 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

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